

REMARKS

Claims 1, 4 and 6 have been amended. The Application contains claims 1-6. Applicants reserve the right to pursue the original claims and other claims in this application and in other applications.

Claim 4 stands objected to because line 3 recites "batter" instead of --battery--. Claim 4 has been amended to address the concern raised in the Office Action. Accordingly, the objection should be withdrawn and the claim allowed.

Claims 1-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakamura (U.S. Patent no. 6,801,894) in view of Satoh (U.S. Patent no. 6,643,527). The rejection is respectfully traversed.

Claim 1 recites an amplifying circuit comprising a battery power source, a regulator, configured to regulate an output of the battery power source and to generate a reference voltage, and a signal ground generating device. According to claim 1, the signal ground generating device is "configured to generate and output a signal ground by applying the reference voltage to a resistance changed in accordance with deterioration of the battery power source." Applicants respectfully submit that the cited combination fails to disclose, teach or suggest the claim 1 invention.

Nakamura relates to a speech synthesizer circuit that includes a reference voltage generating circuit 18a. Circuit 18a generates a signal-ground SG, which is used as a reference voltage for operational amplifiers in the synthesizer. Nakamura Col. 4, ll. 1-12. Nakamura, however, fails to disclose or suggest the recited regulator. Moreover, as acknowledged in the Office Action, Nakamura fails to disclose controlling functions (e.g., the generation of a signal ground) based on the deterioration of the battery source. Office Action at 3. As such, Nakamura fails to disclose, teach or suggest the claimed

signal ground generating device, which is "configured to generate and output a signal ground by applying the reference voltage to a resistance changed in accordance with deterioration of the battery power source." To overcome this deficiency, the Office Action cites to Satoh as showing the adjustment of a reference voltage based on a deterioration of a battery. Applicants respectfully traverse this combination.

Initially, Applicants note that Satoh merely relates to a power switching unit and not an amplifying circuit for a speaker system. Satoh does not have a signal ground generating circuit and does not need one since it is related to a different art than the claimed invention. Satoh, by contrast, teaches supplying a battery output to a control unit, but disconnecting the battery output from a radio unit, when the level of a battery power supply drops below a predetermined level. According to Satoh, if "the voltage supplied from the battery drops, power supply to the radio unit is shut off, but power supply to the control unit having the data storage function is continued, so the user can use only the data storage function such as the electronic pocket notebook function." Satoh Col. 2, ll. 1-45. This is quite different from a signal ground generating device "configured to generate and output a signal ground by applying the reference voltage to a resistance changed in accordance with deterioration of the battery power source." Accordingly, claim 1 is allowable over the cited combination.

Claims 2-5 depend from claim 1 and are allowable along with claim 1 for at least the reasons set forth above.

Claim 6 recites a mobile information terminal. The claim 6 terminal comprises a regulator, configured to regulate an output of the battery power source and to generate a reference voltage and a signal ground generating device "configured to generate and output a signal ground by applying the reference voltage to a resistance changed in accordance with deterioration of the battery power source." As such,

Applicants respectfully submit that claim 6 is allowable for at least the reasons set forth above and on its own merits.

Furthermore, Satoh fails to teach or suggest how to modify Nakamura to obtain the claimed invention. There is therefore no *prima facie* case of obviousness. Obviousness is based on factual findings. "Whether a patent claim is obvious under section 103 depends upon the answer to several factual questions and how the factual answers meld into the legal conclusion of obviousness *vel non*." *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351 (Fed. Cir. 2001). The four underlying factual inquiries are: (1) the scope and content of the prior art; (2) the differences between the claims and the prior art; (3) the level of ordinary skill in the pertinent art; and (4) secondary considerations, if any, of non-obviousness. *Graham v. John Deere Co.*, 393 U.S. 1, 17-18 (1966).

Applicants respectfully submit that there is no motivation to combine the cited references to obtain the invention of claims 1-6. Motivation or suggestion to combine or modify prior art references "must be clear and particular, and it must be supported by actual evidence." *Teleflex, Inc. v. Ficosa North America Corp.*, 299 F.3d 1313, 1334 (Fed. Cir. 2002). Because the "genius of invention is often a combination of known elements which in hindsight seems preordained," the Federal Circuit requires a "rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." *McGinley*, 262, F.3d at 1351. Yet there is no teaching or suggestion within any of the references that provide a motivation to combine them.

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). Thus, a showing of an

obvious combination requires more than just an amalgam of references, each of which provides one feature of the claimed invention.

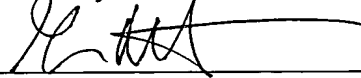
The Office Action has done no more than cite a pair of references, each of which allegedly provides only part of the claimed invention, and allege that their combination renders the invention obvious. However, without the benefit of hindsight, there would have been no motivation to combine these references and the Office Action has failed to provide proof of any such motivation. This is one more reason why claims 1-6 are allowable over the cited combination.

The rejection should be withdrawn and the claims allowed.

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

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